Updated S 08/798,703

(FILE 'HOME' ENTERED AT 10:43:08 ON 22 MAR 2001)

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FILE 'USPATFULL' ENTERED AT 10:43:46 ON 22 MAR 2001
             14 SEA ADVERTIS? PUBLISHER#
L1
            287 SEA ADVERTIS? (P) AVAILABILIT?
L2
            321 SEA ADVERTIS? (P) CAPACIT?
L3
             21 SEA L2 AND L3
L4
             10 SEA L4 (P) HOST?
L5
              1 SEA US5568612/PN
L6
              0 SEA L6 AND L5
L7
              0 SEA TCP/IP
L8
           4254 SEA "TCP/IP"
L9
              1 SEA L5 AND L9
L10
                D
                D FRO
                D KWIC
              2 SEA (US5732219 OR US5696901)/PN
L11
          18543 SEA ADVERTIS?
L12
L13
              1 SEA L12 AND L11
                D KWIC
          82360 SEA AVAILABILITY
L14
         360043 SEA CAPACITY
L15
L16
              0 SEA L11 AND L14
              0 SEA L11 AND L15
L17
L18
              1 SEA L6 AND L12
              0 SEA L18 AND L14
L19
L20
              1 SEA L18 AND L15
                D KWIC
            147 SEA CLIENT# (P) REMOTE? CONTROL?
L21
              0 SEA L6 AND L21
L22
              1 SEA L6 AND REMOT?
L23
                D KWIC
              1 SEA HOST? AND L6
T.24
                D KWIC
L25
              1 SEA L6 AND L9
                D KWIC
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FILE HOME

FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 20 Mar 2001 (20010320/PD)

FILE LAST UPDATED: 20 Mar 2001 (20010320/ED)

HIGHEST PATENT NUMBER: US8345926

CA INDEXING IS CURRENT THROUGH 20 Mar 2001 (20010320/UPCA)

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REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2000

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>>> Page images are available for patents from 1/1/1997. Current <>>> week patent text is typically loaded by Thursday morning and <><> >>> page images are available for display by the end of the day. <>>> Image data for the /FA field are available the following week. <>> >>> Complete CA file indexing for chemical patents (or equivalents) <>> is included in file records. A thesaurus is available for the <>>> USPTO Manual of Classifications in the /NCL, /INCL, and /RPCL <>>> fields. This thesaurus includes catchword terms from the <><>
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>>>	USPTO/MOC subject headings and subheadings. Thesauri are also	<<<
>>>	available for WIPO International Patent Cla fication	<<<
>>>	(IPC) Manuals, editions 1-6, in the /IC1, /IC2, -IC3, /IC4,	<<<
>>>	/IC5, and /IC (/IC6) fields, respectively. The thesauri in	<<<
>>>	the /IC5 and /IC fields include the corresponding catchword	<<<
>>>	terms from the IPC subject headings and subheadings.	<<<

This file contains CAS Registry Numbers for easy and accurate substance identification. $\ \ \, .$

Media-Dependent Receive Statistic

Description

CRC
Total number of Cyclic
Redundancy Check errors
detected by the LBP-Remote
Missed Frames
Number of packets missed due
to lack of space in the
receive buffer, or the
controller is in the. . .

DETD . . . upon any device external to the printer. Furthermore, the initial default configuration may be loaded and subsequently modified from a remote location over the LAN through the NEB's serial or parallel interfaces.

DETD 4n. Downloading Executable Files Into The NEB From A Remote LAN Location

DETD . . . updated executable files across the LAN from the network administrator's PC 14 to the NEB 2. Furthermore, network administrator can remotely alter the executable files stored in DRAM 220 of NEB 2, as desired.

DETD Thus, the network administrator can alter the operation of NEB 2 by remotely sending new operational files to be stored and to be executed from DRAM 220.

DETD . . . and address bus 251 is DRAM 220. DRAM 220 is capable of storing

a ROM firmware image downloaded from a **remote** LAN device into one portion of its memory area (see section 40 above), and application process steps into another portion. . .

DETD 4q. Remotely Altering Firmware

DETD The method for **remotely** altering firmware in EPROM 222 will be discussed in more detail below and with reference to the flowchart illustrated in. . .

DETD . . . However, the NEB can be reconfigured subsequently by the customer. That is, a network administrator may download data from a remote LAN device, which data may contain anything from a patch code, to manufacturing test routines, to entire firmware updates to.

DETD . . . by sending executable files across the LAN from the network administrator's PC 14 to NEB 2. The network administrator can remotely alter the ROM firmware image in EPROM 222, as desired.

DETD . . . still be stored in a non-volatile way. (Of course, as discussed

in paragraph 4q, the MAC address could also be **remotely** flashed into the EPROM at the same time the RAM firmware image is updated, after NEB 2 is coupled to. . .

=> s host? and 16

107742 HOST?

L24 1 HOST? AND L6

=> d kwic

L24 ANSWER 1 OF 1 USPATFULL PI US 5568612 19961022

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. . . merely accepting information from the LAN and printing such
SUMM
    information on a grd copy. Moreover, such printe usually required a host personal computer ("PC") to effectively manage he flow of
       data to the printer, i.e., to act as a "server" for the printer. This
       almost always required that the host PC be dedicated solely to
       the printer server task.
       . . . those servers are available. This is because the % \left( 1\right) =\left( 1\right) ^{2}
SUMM
       Novell-compatible Server Advertising Protocol ("SAP") assumes that each
       network node is the host to only a single network server.
       Accordingly, even if more than one server were provided in a single
       network node, . . .
=> s 16 and 19
            1 L6 AND L9
L25
=> d kwic
L25 ANSWER 1 OF 1 USPATFULL PI US 5568612 19961022
      . . . Ethernet data received over the LAN may be one of the
DETD
following
       software protocols: e.g. NetWare.RTM. over SPX/IPX; UNIX over
     TCP/IP; or Mac Systems 7 over AppleTalk. Basically,
       the software protocol type may be determined according to the frame
       packet type. .
       . . . over a LAN bus using SPX/IPX operating protocol, while a
DETD
       UNIX-compatible operating system communicates over the LAN bus using a
     TCP/IP operating protocol. Other operating systems,
       such as the AppleTalk.RTM. operating system provided by Apple
       Corporation, use respectively different operating protocols. .
       UNIX-compatible operating protocols are illustrated at reference
DETD
       numerals 335, 336 and 337. More specifically, 335 and 336 comprise a
     TCP/IP operating protocol stack (or tower) by which
       UNIX-compatible application programs communicate to LAN bus 6 via LSL.
                                              . .
       UNIX-compatible network application.
       . . . UNIX operating system to use the same frame packet type; it is
DETD
       the operating system protocols (SPX/IPX for Novell and TCP/
     IP for UNIX) which determine which one of the operating systems
       in a multiprotocol environment is currently communicating on the LAN.
      . . . which has the proper IPX header. Then, PRESCAN binds
DETD
       simultaneously through LSL through all three frame packet types having
a
     TCP/IP protocol tower. PRESCAN determines the frame
       packet type being used by the UNIX-compatible operating system in
       accordance with the data group having the proper TCP/
     IP header.
       . . . LSL to bind simultaneously to a plurality of frame packet
DETD
types
       corresponding to the second operating system protocol, such as
     TCP/IP for a UNIX operating system. The network driver
       monitors the LAN communication bus to capture broadcast traffic for the
       second. . . the packet types. The PRESCAN module prescans each data
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group for the presence of a predetermined header, such as the

type corresponding to the data group having the predetermined header.

TCP/IP header for UNIX, and stores the frame packet

ANSWER 1 OF 1 USPATFULL L7 <--US 5568612 19961022 PΙ . . . Ethernet data received over the LAN may be one of the DETD following software protocols: e.g. NetWare.RTM. over SPX/IPX; UNIX over TCP/IP; or Mac Systems 7 over AppleTalk. Basically, the software protocol type may be determined according to the frame packet type. over a LAN bus using SPX/IPX operating protocol, while a DETD UNIX-compatible operating system communicates over the LAN bus using a TCP/IP operating protocol. Other operating systems, such as the AppleTalk.RTM. operating system provided by Apple Corporation, use respectively different operating protocols. UNIX-compatible operating protocols are illustrated at reference DETD numerals 335, 336 and 337. More specifically, 335 and 336 comprise a TCP/IP operating protocol stack (or tower) by which UNIX-compatible application programs communicate to LAN bus 6 via LSL. UNIX-compatible network application. UNIX operating system to use the same frame packet type; it is DETD the operating system protocols (SPX/IPX for Novell and TCP/ IP for UNIX) which determine which one of the operating systems in a multiprotocol environment is currently communicating on the LAN. . which has the proper IPX header. Then, PRESCAN binds DETD simultaneously through LSL through all three frame packet types having TCP/IP protocol tower. PRESCAN determines the frame packet type being used by the UNIX-compatible operating system in accordance with the data group having the proper TCP/ IP header. . . LSL to bind simultaneously to a plurality of frame packet DETD types corresponding to the second operating system protocol, such as TCP/IP for a UNIX operating system. The network driver monitors the LAN communication bus to capture broadcast traffic for the second. . . the packet types. The PRESCAN module prescans each data group for the presence of a predetermined header, such as the TCP/IP header for UNIX, and stores the frame packet type corresponding to the data group having the predetermined header.

L11 ANSWER 1 OF 1 USPATFULL PI US 5568612 19961022

. . . Printer

<--

DETD NEB-to-Network

CPSOCKET (30KB)

Concurrent multi-

communication in

protocol operation

NEB EPROM

NEB Environment in

(15KB)

Monitor, loader,

NEB EPROM

POST, etc.

Extensions to

CPCONSOL.EXE

(180KB)

Remote Control &

NetWare .RTM.

Stats, Auto-

PCONSOLE for Printer

CPINIT.EXE

(120KB)

Reconfiguration,

Control/Configuration

Print Job

in Administrator's

Logs/Statistics

PC 14

DETD In summary, at Step S28, a method for **remotely**controlling a manually-operable function of a networked printer

through an interactive network board having a LAN interface for LAN

communication, comprises. . .

and downloading of new applets. To ensure widespread

availability of the ew features made possible by the present architecture, the customer premise equipment may be provided to end users. . . being amortized over the services sold to the user through the equipment. Additionally, the service provider may collect fees from advertisers to subsidize the cost of the equipment. . . as an IP proxy server such that each of the devices connected DETD to the server utilizes transmission control protocol/Internet protocol (TCP/IP) protocol. This configuration allows any device associated with the ISD to access the Internet via an IP connection through the. . . the ISD 22 is configured as an IP proxy server, it may accommodate additional devices that do not support the TCP /IP protocol. In this embodiment, the ISD 22 may have a proprietary or conventional interface connecting the ISD 22 to any. . . two or more twisted pair connected with the local office. The DETD videophone can contain Win32 application programable interfaces (APIs) supporting TCP/IP, POP3, RAS, and TAPI protocols with a built in browser. One of the twisted pair will access the AT&T server. . . A requirement of the touch screen services is availability of DETD a data link to the server. In later phases of implementation, a DSL link to the home is provided. . . built-in motion detector is triggered bу someone nearby. During these periods of local presence, the AT&T server will put up advertising and personal information on the screen and be available to support touch activated services (e.g., calling, CLASS services), and directory. . . . (LAN) Intranet access (FIGS. 13 and 14). For business DETD customers, the architecture supports secure electronic commerce and personalized delivery of advertising to consumers with the capacity to tailor the advertising campaign to the consumer's profile (FIG. 17). What is claimed is: 13. A network server platform of a telecommunications network for hosting a plurality of services, said network server platform

CLM

comprising a memory for storing a user profile, said user profile containing.

14. A network server platform of a telecommunications network for hosting a plurality of services, said network server platform comprising a memory for storing a user profile, said user profile containing.

ds 26-27

L4 ANSWER 1 OF 1 USPATFULL

PI US 5568612 19961022 <-
DETD . . . CRPRINTER. If CPSERVER is selected, it is necessary to designate the name of the print server assigned to the NEB,

password, application buffer size, queue service mode, form numbers, the printer number of the printer in which the NEB resides, the. . .

L10 ANSWER 1 OF 1 USPATFULL

United States Patent Patent Number: 6044403
Date of Patent: 28 Mar 2000

Network server platform for internet, JAVA server and video application server

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Russell, Jesse Eugene, Piscataway, NJ, United States

Assignee: AT&T Corp, New York, NY, United States (U.S. corporation)

Appl. No.: 97-1354 Filed: 31 Dec 1997

Datont

Int. Cl. G06F013-00

Issue U.S. Cl. 709/225.000; 709/217.000; 709/223.000; 709/238.000 Current U.S. Cl. 709/225.000; 709/217.000; 709/223.000; 709/238.000 Field of Search 709/201; 709/202; 709/203; 709/217; 709/219; 709/223; 709/224; 709/225; 709/227; 709/229; 709/238; 709/300;

709/250

Reference Cited

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US US US US US US US	5610910 5619684 5644628 5671267 5682195 5684918 5740231 5761662 5796952	Mar 1997 Apr 1997 Jul 1997 Sep 1997 Oct 1997 Nov 1997 Apr 1998 Jun 1998	379/088.220 707/010.000 709/224.000	Focsaneanu et al. Goodwin et al. Schwarzer et al. August et al. Hendricks et al. Abecassis Cohn et al. Dasan Davis et al.

Dec 19<u>98</u> 379/201.000 Rondeau US 5850433 370/352.000 US 5867495 Feb 19 Elliott et al. Mar 199 379/265.000 Andrews et al. US 5878130 US 5889958 Mar 1999 709/229.000 Willens Apr 1999 US 5892909 709/201.000 Grasso et al. Apr 1999 707/003.000 Hunt et al. US 5893091

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US Patent Application 08/858,170 filed May 14, 1997, entitled Wide Band Transmission Through Wire, to Robert R. Miller, II, Jesse E. Russell and Richard R. Shively, 15 pages.

Art Unit - 278
Primary Examiner - Vu, Viet D.

14 Claim(s), 21 Drawing Figure(s), 21 Drawing Page(s)

ABSTRACT

A new architecture capable of utilizing the existing twisted pair interface between the customer services equipment and the local office is used to provide

a vast array of new services to customers. Using an intelligent services director (ISD) at the customer services equipment and a facilities management platform (FMP) at the local office, new services such as simultaneous, multiple

calls (voice analog or digital), facsimile, Internet traffic and other data

be transmitted over the existing single twisted pair using xDSL transmission schemes. New services such as the implementation of Internet connectivity, videophone, utility metering, broadcasting, multicasting, bill viewing, information pushing in response to a user profile, directory look-up and other services can be implemented via a network server platform via this architecture. A network server platform for hosting a plurality of services comprises, for example, a memory for storing a user profile, the user profile containing interests of a user, and for storing information related to their interests and a controller for controlling the collection of information from information servers and for pushing the collected information to the user in accordance with their defined priority.

=> d kwic

L10 ANSWER 1 OF 1 USPATFULL

AB . . . look-up and other services can be implemented via a network server platform via this architecture. A network server platform for hosting a plurality of services comprises, for example, a memory for storing a user profile, the user profile containing interests of.

SUMM . . . connected device and dedicated applications for specific devices such as bill viewing from a video phone. The network server platform hosts the plurality of services and comprises, for example, a memory for storing a user profile, the user profile containing interests. . .

 ${\tt DETD}$. . . to the FMP 32 and thereafter to the NSP 36 for reinitialization

L11 ANSWER 1 OF 1 USPATFULL <---US 5568612 19961022 PI . . . Printer DETD NEB-to-Network CPSOCKET (30KB) Concurrent multiprotocol operation communication in NEB EPROM NEB Environment in (15KB) Monitor, loader, POST, etc. NEB EPROM Extensions to CPCONSOL.EXE (180KB) Remote Control & Stats, Auto-NetWare .RTM. PCONSOLE for Printer CPINIT.EXE (120KB) Reconfiguration, Control/Configuration Print Job in Administrator's Logs/Statistics PC 14

DETD In summary, at Step S28, a method for **remotely controlling** a manually-operable function of a networked printer

through an interactive network board having a LAN interface for LAN

communication, comprises. . .

L3 ANSWER 2 OF 2 USPATFULL
PI US 5568612 19961022 <-DETD . . . are provided between a plurality of LANs, as shown in FIG. 2, such that resources, including printers, can be shared "internet "i.e., from one LAN to another.